



*Exhibit 1*

*The Claims as of September 9, 2008*

Claim 1 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound in isolated or purified form selected from the group consisting of cobaltocene-octamethyl and stigmastan-3,5,-diene.

Claim 2 (Withdrawn): The pharmaceutical composition of claim 1, wherein the compound is cobaltocene-octamethyl.

Claim 3 (Withdrawn): The pharmaceutical composition of claim 1, wherein the compound is stigmastan-3,5,-diene.

Claim 4 (Withdrawn): The pharmaceutical composition of claim 1, comprising cobaltocene-octamethyl, stigmastan-3,5,-diene, and friedelin.

Claim 5 (Withdrawn): The pharmaceutical composition of claim 1, further comprising at least one compound selected from the group consisting of  $\alpha$ -caryophyllene,  $\beta$ -caryophyllene, caryophyllene oxide, friedelin, cyclododecane, acetic acid, and a terpene.

Claim 6 (Withdrawn): The pharmaceutical composition of claim 2, further comprising a terpene or acetic acid.

Claim 7 (Withdrawn): The pharmaceutical composition of claim 6, wherein said terpene is  $\beta$ -myrceane.

Claim 8 (Withdrawn): The pharmaceutical composition of claim 6, further comprising hexadecanoic acid.

Claim 9 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound selected from the group consisting of galoxolide and benzyl salicylate.

Claim 10 (Withdrawn): The pharmaceutical composition of claim 9, comprising galoxolide and benzyl salicylate.

Claim 11 (Withdrawn): The pharmaceutical composition of claim 9, further comprising at least one compound selected from the group consisting of 3-cyclohexane-1-methanol, camphene, 1,4-cycloprop-azulene, and phytol.

Claim 12 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is galoxolide.

Claim 13 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is benzyl salicylate.

Claim 14 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is  $\alpha$ -pinene.

Claim 15 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound selected from the group consisting of galoxolide, benzyl salicylate, eucalyptol and  $\alpha$ -pinene, wherein the composition has antimycobacterial activity.

Claims 16-25 (Canceled).

Claim 26 (Withdrawn): A method of inhibiting the growth of a mycobacterium, comprising administering a composition comprising a carrier and at least one compound selected from among cobaltocene-octamethyl, stigmastan, 3,5-diene, galoxolide, benzyl salicylate, eucalyptol, and  $\alpha$ -pinene.

Claim 27 (Withdrawn): The method of claim 26, wherein said *M. avium*, *M. bovis*, *M. intracellulare*, *M. kansasii*, *M. leprae*, *M. marinum*, *M. phlie*, *M. scrofulaceum*, *M. smegmatis*, *M. fortuitum*, *M. tuberculosis*, or *M. ulcerans*.

Claim 28 (Withdrawn): The method of claim 26, wherein said mycobacterium is in a mammal and said mammal is a human or a bovine.

Claim 29 (Withdrawn): The method of claim 28, wherein said composition is administered orally.

Claim 30 (Withdrawn): The pharmaceutical composition of claim 15, wherein the compound is eucalyptol.

Claim 31 (Withdrawn): The pharmaceutical composition of claim 15, wherein the compound is  $\alpha$ -pinene.

Claim 32 (Currently amended): A method of preparing and use of a composition having antimicrobial activity comprising extracting a material from a *Mammea Americana* plant in an organic solvent, contacting the extracted material with a chromatographic separation system, ~~and~~ eluting a fraction having antimicrobial activity from the chromatographic separation system with a mobile polar phase, and administering the fraction having antimicrobial activity to bacteria. ~~to obtain a composition, wherein the plant material is from Mammea Americana and wherein the composition has antimicrobial activity.~~

Claim 33 (Canceled)

Claim 34 (Withdrawn): The method of claim 32, wherein said plant is *Marchantaceae polymorpha hepatica*.

Claim 35 (Withdrawn): The method of claim 32, wherein said plant is *Callistemon citrinus skeels*.

Claim 36 (Canceled).

Claim 37 (Canceled).

Claim 38 (Canceled).

Claim 39 (Previously presented): The method of claim 32, wherein said composition comprises stigmastan-3,5,-diene.

Claim 40 (Currently amended): The method of claim ~~39~~32, wherein said composition further comprises at least one compound selected from the group consisting of friedelin, cyclododecane, and acetic acid.

Claim 41 (Currently amended): The method of claim 39, wherein said composition further comprises friedelin.

Claim 42 (Withdrawn): The method of claim 32, wherein said plant material is from leaves of *Marchantaceae polymorpha* and said composition comprises ~~cobaltocene-octomet~~ cobaltocene-octamethyl.

Claim 43 (Withdrawn): The method of claim 42, wherein said composition further comprises at least one compound selected from the group consisting of  $\beta$ -myrceane, acetic acid, and hexadecanoic acid.

Claim 44 (Withdrawn): The method of claim 42, wherein said composition further comprises  $\beta$ -myrceane.

Claim 45 (Withdrawn): The method of claim 32, wherein said plant material is from leaves of *Callistemon citrinus* and said composition comprises at least one compound selected from the group consisting of galoxolide, benzyl salicylate, and  $\alpha$ -pinene.

Claim 46 (Withdrawn): The method of claim 45, wherein said composition further comprises at least one compound selected from the group consisting of eucalyptol, a terpene, 3-cyclohexane-1-methanol, camphene, 1,4-cycloprop-azulene, and phytol.

Claim 47 (Previously presented): The method of claim 32, wherein the organic solvent is methylene chloride.

Claim 48 (Presently amended): The method of claim 32, wherein the ~~antimicrobial activity~~ the bacteria is against a mycobacterium.

Claim 49 (Previously presented): The method of claim 48, wherein the mycobacterium is *M. avium*, *M. bovis*, *M. intracellulare*, *M. kansaii*, *M. leprae*, *M. marinum*, *M. phlei*, *M. scrofulaceum*, *M. smegmatis*, *M. fortuitum*, *M. tuberculosis*, or *M. ulcerans*.

Claim 50 (Canceled).

Claim 51 (Canceled).

Claim 52 (Canceled).

Claim 53 (Canceled).

Claim 54 (Canceled).

Claim 55 (Canceled).

Claim 56 (Previously presented): The method of Claim 32, wherein the material is extracted from plant leaves.

Claim 57 (Previously presented): The method of claim 40, wherein said composition further comprises at least one compound selected from the group consisting of a terpene, a caryophyllene, and cyclododecaine.

Claim 58 (Newly presented): The method of Claim 32, wherein the administering of the fraction having antimicrobial activity against microbes, comprises assaying the fraction for activity against *E. coli* or mycobacterium.

Claim 59 (Newly presented): A method of preparing a composition having antimicrobial activity, comprising extracting a material from a *Mammea Americana* plant in an organic solvent, contacting the extracted material with a chromatographic separation system, selecting or having pre-selected a fraction having antimicrobial activity for elution from the chromatographic separation system, and eluting and retaining said fraction having antimicrobial activity with a mobile polar phase.

Claim 60 (Newly presented): The method of Claim 59, wherein more than one fraction is eluted from the chromatographic system and one fraction is retained for use based on its comprising stigmastan or cobaltacene octamethyl.

Claim 61 (Newly presented): The method of Claims 59, wherein said selection or pre-selection of a fraction is based by performing an antimicrobial assay.

Claim 62 (Newly presented): The method of Claim 61, wherein said antimicrobial assay is a mycobacterium based assay.

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